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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,546	09/01/2006	Jozef Laurentius Kessels	NL04 0184 US1	4840
65913	7590	11/20/2009	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			ABBASZADEH, JAWEED A	
			ART UNIT	PAPER NUMBER
			2115	
			NOTIFICATION DATE	DELIVERY MODE
			11/20/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/591,546	Applicant(s) KESSELS, JOZEF LAURENTIUS	
	Examiner JAWEED A. ABBASZADEH	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/25/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 103

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackey et al (hereinafter 'Mackey') US 7,123,674.

Mackey was cited as the prior art reference in the previous office action. As such, Mackey's teachings are hereby incorporated by reference.

As to claim 1, Mackey teaches a circuit comprising a first [Fig. 3, 302] and a second circuit module [Fig. 3, 304] and a synchronization module [Fig. 3, 306] the first and the second module being mutually a-synchronous, and the first and the second module being coupled by the synchronization module [col. 2, lines 34-39], the synchronization module comprising

a transfer register for storing data which is communicated between the two circuit modules [Fig. 3, 311 and col. 2, lines 40-41],

a control circuit [Fig. 3, 312] for controlling the register in response to a respective timing signal (St1, St2) from the first and the second circuit module [Fig. 3, SCLK and DCLK and col. 2, lines 45-53], the control circuit comprising a control chain [Fig. 4, 402a, 402b, 419, 416, 402c, 415 and col. 2, lines 65-67] for generating a control signal (CR) for the transfer register [Fig. 4, 315 and col. lines 45-49] the control chain including at least:

-one edge sensitive element for delaying a change in the value of the control signal value until a transition in a selected one of the timing signals is detected

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[Fig. 4, 402a, 402b, 402c—D flip flops are edge sensitive and are triggered by the edge of a CLK signal. D flip flops can act as a delay because the signal inputted into the flip flops is not outputted until the transition of the clock signal triggers each flip flop.

Therefore, the delay is determined by the period of the clock signal.]. Mackey does not teach a repeater for inducing changes in the value of the control signal wherein the repeater is operable with a single input. Specifically, Mackey teaches a control signal [Fig. 4, source enable signal 315] in which the value is not changed. It would have been obvious to one of ordinary skill in the art to have included a repeater to induce changes in the value of the source enable signal because a repeater can simply be an inverter. An inverter is well known in the art and its functionality involves outputting the opposite of what is inputted, this changes the value of the signal. For example, if the enable signal is active high, the inverter will output an active low signal. It is insignificant whether the enable signal is active low or active high because the source enable controller [Fig. 3, 316] can be easily designed to respond to either one.

As to claims 2-9, Mackey teaches these claims according to the reasoning set forth in the office action mailed 11/14/2008.

As to claims 10-20, Mackey teaches this claim according to the reasoning set forth in claims 1-9.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. Applicant made amendments to further

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limit the “repeater” to be operable with a single input. Examiner provided new grounds of rejection supra.

Applicant further argued that an inherent delay does not perform a delay unit a signal is detected. Examiner modified the rejection to further clarify how Mackey’s circuit provides a delay based on the transition of a timing signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAWEED A. ABBASZADEH whose telephone number is (571)270-1640. The examiner can normally be reached on Mon-Fri: 7:30 a.m.-5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Thomas C. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Jaweed A Abbaszadeh/
Examiner, Art Unit 2115
11/6/2009

/Thomas Lee/
Supervisory Patent Examiner, Art Unit 2115